OFFICE OF THE STATE CIO

NUMBER: **IT POLICY LETTER** ITPL 10-XX SUBJECT: DATE ISSUED: SERVER VIRTUALIZATION Emphasis: Consolidation of server workload onto high capacity servers EXPIRES: Until Rescinded REFERENCES: ISSUING AGENCY: Government Code Section 11545 OFFICE OF THE STATE CHIEF Chapter 404, Statutes of 2010 INFORMATION OFFICER Information Technology Policy Letters 09-06, 10-xx, and 10-xxx Statewide Information Management Manual Sections 18C, 58D, and 158

Note: Agency Chief Information Officers (Agency CIO) and Department Chief Information Officers (CIO) are requested to forward a copy of this Information Technology Policy Letter (ITPL) to their respective Procurement Managers, Project Management Office(s) and Information Technology (IT) Project Managers.

DISTRIBUTION

Agency Secretaries Department Directors

Agency Chief Information Officers
Department Chief Information Officers

PURPOSE

Within California State Government, the past practice was to dedicate one physical server to a single workload, which resulted in chronic underutilization, an expanding data center footprint, and excessive data center power consumption. Building on efforts to strengthen the Statewide Enterprise Architecture (EA) Program, and in support of energy consumption reduction goals identified in Chapter 404, Statutes of 2010 (AB 2408), the purpose of this ITPL is to:

- Formally establish the use of server virtualization software in California State Government as an acceptable practice.
- Remind all state agencies¹ of the requirement to utilize the EA Server Virtualization Software Standard that is published in Section 58D.1 of the Statewide Information Management Manual (SIMM) as Technical Reference Model (TRM) 4.17.865.001.
- Remind all state agencies of the suggested EA Server Virtualization Practices that are published in Section 158A of the SIMM as TRM 4.17.865.002.
- Announce updates to the Information Technology Acquisition Plan (ITAP) Request Excel template and XML Schema included in Section 18C of the SIMM.

¹ When capitalized, the term "Agency" refers to one of the state's super Agencies such as the State and Consumer Services Agency or the Health and Human Services Agency. When used in lower case, the term "agency" refers to any office department, board, bureau, commission or other organizational entity within state government. Within this ITPL, "agency" and "department" are used interchangeably.

BACKGROUND

Within the authority of <u>Government Code (GC) Section 11545</u>, the OCIO has responsibility and authority for the establishment and enforcement of state information technology policy in California State Government. This includes establishing and enforcing state IT strategic plans, policies, standards, practices, and EA.

In addition, Chapter 404 specifies statewide efforts to reduce energy consumption by 20 percent below the 2009 baseline by July 1, 2011, and by 30 percent below the 2009 baseline by July 1, 2012.

ITPL 10-XXX, Enterprise Architecture Standards and Procedures, included a requirement to comply with the EA Standards in SIMM Section 58D, which includes server virtualization software. Server virtualization software allows the consolidation of new and existing workloads distributed over multiple servers onto fewer high capacity servers. Consolidating workloads onto high capacity servers reduces the physical server inventory, which in turn decreases the associated footprint and power consumption.

POLICY AND PROCESS

Agencies shall utilize virtualized server environments in accordance with the EA Server Virtualization Software Standard published in Section 58D.1 for new workload, increases to existing workload, and server refreshes.

The ITAP process established pursuant to ITPL 09-06 will be used to review and validate compliance with this policy.

EXCEPTIONS

In the event of an emergency as defined in Public Contract Code Section 1102, agencies may conduct acquisitions for IT goods and services with an aggregate value of \$25,000 or less without an approved ITAP². Such acquisitions may be conducted with concurrent notification to the OCIO Program Management Office (PMO).

APPLICABILITY

All state agencies under the direct executive authority of the Governor's Office are required to comply with this policy.

SAM AND SIMM CHANGES

Updates to the SAM and the SIMM concerning ITAPs, virtualization and EA Standards and EA Practices were previously announced in the following ITPLs:

 ITPL 09-06, Promoting Efficient and Effective Use of IT through Acquisition Planning – Included an announcement that the SIMM Section 18C, IT Acquisition Plan, was established to add the ITAP Request Excel Template and XML Schema.

Please note: The ITAP Request Excel Template and the XML Schema have been updated to change Fiscal Year references from 2009-10 to 2010-11.

 ITPL 10-XX, Data Center Assignments and Consolidation – Included an announcement that the SAM Section 4819.2, Definitions, would be updated to include a definition for

² An emergency is defined in the Public Contract Code 1102 as a "sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services". SAM Section 6560, specifies that emergency expenditures cannot exceed \$25,000, unless approved by the Department of Finance.

Virtualization.

- ITPL 10-XX, Enterprise Architecture Standards and Procedures – Included the following announcements:
 - An update to the SAM Section 4906, Enterprise Architecture, to include narrative regarding agency compliance with the EA Standards and EA Practices.
 - The addition of SIMM Section 58D, Enterprise Architecture Standards, that agencies must comply with, which included the EA Server Virtualization Software Standard TRM 4.17.865.001 in SIMM Section 58D.1.
 - The addition of SIMM Section 158, Enterprise Architecture Practices, that agencies are encouraged to follow, which included the EA Server Virtualization Practices TRM 4.17.865.002 in SIMM Section 158A.

An informational copy of the SAM updates released in the ITPLs previously referenced is included in this ITPL as Attachment A. Similarly, the SIMM content is available at: http://www.cio.ca.gov/Government/IT_Policy/SIMM.html.

CONTACT

Questions regarding EA should be directed to Lee Mosbrucker, Deputy Director for Enterprise Architecture, at (916) 403-9624, or by e-mail at Lee.Mosbrucker@state.ca.gov.

Questions regarding Virtualization should be directed to Carol Kelly, Project Director, Consolidation, Office of the State Chief Information Officer by e-mail at Carol.Kelly@state.ca.gov.

Questions regarding ITAPs should be directed to your OCIO PMO representative. A listing of PMO Managers and Principals, their departmental assignments, and department delegated cost thresholds can be found at the OCIO Web site located at: http://www.cio.ca.gov/Contact_Us/staff_assignments.html.

SIGNATURE

Teri Takai, Chief Information Officer State of California

4819.2 **DEFINITIONS**

(Revised xx/10)

Virtualization: A framework or methodology of dividing the resources of a computer into multiple execution environments, by applying one or more concepts or technologies such as hardware and software partitioning, time-sharing, partial or complete machine simulation, emulation, quality of service, and many others.

4906 ENTERPRISE ARCHITECTURE

(Revised XX/10)

The statewide Enterprise Architecture (EA) is developed in a cooperative, managed, and coordinated effort facilitated by the Office of the State Chief Information Officer. The National Association of State Chief Information Officers methodology and the Federal Enterprise Architecture framework included in SIMM Section 58A are adopted as the state's standards to develop and maintain the statewide EA.

Accordingly, state agencies shall implement EA in accordance with SIMM Section 58. This includes complying with the EA Standards in SIMM Section 58D. In addition, state agencies shall, to the extent practical, utilize the EA Practices included in SIMM Section 158.